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THE REPUTATION OF THE LANTERN FLY.

BY JOHN C. BRANNER.

IN nearly every part of Brazil one may hear the most incredible stories of a deadly insect, the very name of which inspires the greatest awe. When I first heard these stories of the terrible *gitiranabóia*, *tiranabóia*, etc., as it is called, I was naturally rather skeptical, but continually hearing them repeated and testified to, not only by the common people but even by men of education and standing, and seeing in print accounts of the devastation wrought by this insect, I was finally induced to inquire into its existence and character.

To give an idea of the popular opinion of the *gitiranabóia*, I need only give a few specimens of the stories that are told of it. The prevailing opinion is, that it is about the size of our seventeen-year locust or a little larger, having a long poisonous beak projecting from its large head; that it has great powers of flight, and when, in its wild career, it strikes any living object—if an animal, no matter how large or powerful—it falls dead upon the spot; if a tree it soon wilts and dies.

A certain distinguished Brazilian engineer corroborated the general truth of these stories, and assured me that along the Amazonas a monkey might sometimes be seen among the top-most branches of a lofty tree, when all of a sudden he would come tumbling down dead, without any apparent cause, struck by the fatal *gitiranabóia*. An extract from a Spanish American newspaper was shown me a couple of years ago in which this insect was spoken of as destroying the cattle of Brazil in the grazing country of the southern provinces. In Pará I was assured that

it was known to have stung a child which died a few days afterwards in great agony, and in spite of all the physicians could do.

Many such cases were mentioned to me in various parts of the empire, and although on several occasions I met persons who claimed to have seen the insect itself, I was never able to come upon an actual case of injury done by the insect, or to see any one who had seen it wound the offended party.

Search for the *gitiranabóia* itself was nigh proving futile also, but by dint of perseverance, cross-examinations, the sifting and patching together of evidence, I succeeded finally in cornering this destroyer of life in general and of the human race in particular. Some of my informants told me that it folded its long beak beneath its body when it was not angry or bent upon destruction. Here, perhaps, was one character. Others said that its head was very large in proportion to the rest of its body, in size and general form much resembling a peanut. Others again told of its being blind, though it appeared to have large eyes on the sides of its big, ugly head, while others added that this head was luminous. These characters pointed plainly to the *fulgore* or *porte-lanterne* of the French entomologists.

Before trying to clear its character I took pains to assure myself that the *Fulgora lanternaria* is the so-called *gitiranabóia*, and that it is generally supposed by the common people of Brazil to be poisonous. Just here trouble began again, for once I could show that this insect was neither luminous nor harmful, it would be stoutly declared that "in that case this was not the *true gitiranabóia*." And this is exactly what happened.¹

Along the coast south of Bahia² the *gitiranabóia* is called the *bicho do pau paraky'ba*, because it frequents the tree there known as the *pau paraky'ba* (*Simaba versicolor* St. Hilaire).

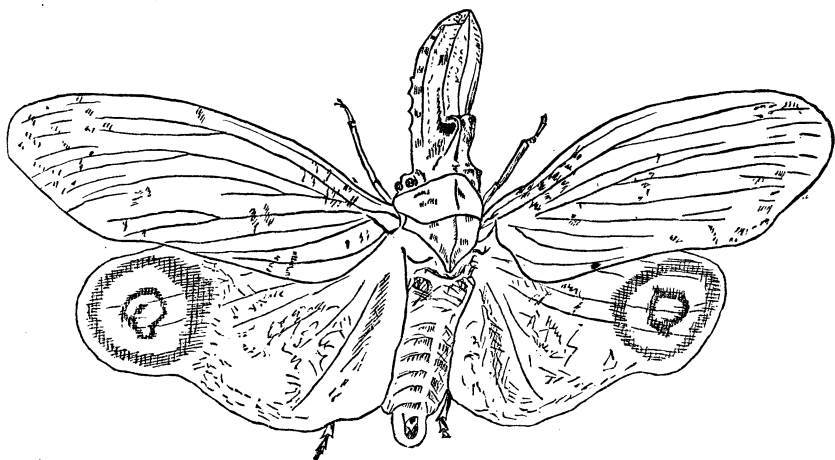
On one occasion a living specimen was taken to Bahia as a great curiosity, and exhibited on exchange, where it was looked upon and treated with the greatest respect. Dr. Antonio de Lacerda, a Brazilian gentleman who takes an active and intelligent interest in entomology, saw the specimen and heard the countryman's story of the death of a person caused by this very

¹ I had a very similar experience in Brazil with a certain snake. The reputation of the *salamandro* was, if anything, a little worse than that of the *gitiranabóia*, but when the snake was found, and I showed that its bite was not fatal, or even very painful, I was told: "Then that is not the genuine *salamandro*."

² Specimens of these insects can be had of dealers in Bahia for about 30 cents each.

insect. He laughed at the seriousness with which the story was received, refused to believe that it had injured any one, and to the horror of every one present, took the insect in his hand and repeatedly thrust his finger against the point of its beak which was said to be so deadly. I mention this case especially to show that there can be no doubt about the identity of the insect. Dr. Lacerda also showed me specimens of it in his own collection.

Another proof of its identity is given by Pompeo de Souza in his *Ensaio Estatístico da Provincia do Ceará*, p. 216. Among the insects of that province he mentions the *tiranabóia*, which, he says, "is supposed to be poisonous, but there is no fact to justify this story." A dried specimen was sent him from the interior, and he declares it to be a hemipter.



Fulgora lanternaria. Natural size.

It goes without saying that this *gitiranabóia* is perfectly harmless. It may be added also that its scientific name is a misnomer as far as it relates to its producing light. I was often assured that its head was luminous, but I have never met a single person who claimed to have seen this luminosity. Snr. Luiz A. A. de Carvalho, Jr., of Rio de Janeiro, who has several species of these beautiful insects in his collection, assured me that he knew of no evidence whatever that they produced light. Prince Maximilien de Wied-Neuwied says on this subject: "Nous n'avons jamais aperçu le moindre vestige de la lueur éclatante du fulgore porte-lanterne (*Fulgora lanternaria*) quoique nous avons souvent pris cet insecte sur les arbres."

Instances of extravagant stories of this kind are not uncommon in Brazil. The case of the *salamandro* already referred to is a good example. Another is that of a plant, a species of smilax, which is said to grow from the dead body of a Cicada. Belief in this story is so general that through some parts of the country a certain plant is popularly known as the *japecanga da cigarra*, or cicada smilax. Those who claimed to have actually seen this phenomenon represented that the plants seen by them were all quite young. Doubtless they were cases of larvæ killed by parasitic fungoid growth.¹

Such stories come, of course, from imperfect observation, and have an air of truth about them derived from their association with known objects or facts.

NOTE.—We are unable to find any reference in entomological works as to the poisonous nature of this insect, which is undoubtedly perfectly harmless. It is, however, disputed whether the insect is luminous or not. See Westwood's Introduction to the Modern Classification of Insects, II, 428, where after referring to his figure of the head of *Fulgora lanternaria*, he says it "is the part of the body asserted by various writers to emit a strong light by night, analogous to that of the fireflies." The account of the luminosity of this insect originated with Madam Merian, but it was denied by Olivier, in which opinion Hoffmansegg, the Prince Von Nieuwied and Lacordaire concurred. "M. Wesmaël has recently reasserted the luminous property of the South American species on the authority of a friend who had witnessed it alive. And W. Baird, Esq., has informed me of the existence of a Chinese edict against young ladies keeping lantern flies." In our Guide to the study of Insects (p. 533) is the following statement regarding the East African lantern fly: "Mr. Caleb Cooke, of Salem, who resided several years in Zanzibar, Africa, informs me that the lantern fly is said by the natives to be luminous. They state that the long snout lights up in the night, and in describing it say "its head is like a lamp" (keetchua kana-tah).—A. S. Packard.

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AGE OF FOREST TREES.

BY JNO. T. CAMPBELL.

THE age of trees that have an exogenous growth is correctly indicated by the concentric rings of growth shown in their cross-section. These rings also, when correctly interpreted give a true history of the tree from its infancy to maturity and old age; showing correctly the dates of prosperity and adversity in the career of the tree.

¹ Comte Charles d'Ursel, in his *Sud Amérique*, figures and describes, after a fashion, "l'insecte qui devient plante," found in Brazil. Speaking of the plant, he says that "au printemps elle se couvre de fleurs bleues," p. 107.